



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,396	02/28/2002	Shujin Zhang	CISCO-5810	1565

7590 09/21/2004
MARC S. HANISH
THELEN REID & PRIEST LLP
P.O. BOX 640640
SAN JOSE, CA 95164-0640

EXAMINER

TRAN, PHUC H

ART UNIT	PAPER NUMBER
----------	--------------

2666

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,396

Applicant(s)

ZHANG ET AL.

Examiner

PHUC H TRAN

Art Unit

2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/28/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-42 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1-38 of U.S. Patent No. 6396833 B1.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Application 10/086396	Patent No. 6,396,833
<p>1. A method for routing a packet sent from a user in a system in which the user may be connected to multiple networks simultaneously, including:</p> <ul style="list-style-type: none"> extracting a source address from the packet; finding a per-user routing table corresponding to said source address, said per-user routing table containing entries corresponding to one or more currently accessible networks for the user and the range of network addresses corresponding to said currently accessible networks; extracting a destination address from the packet; seeking an entry in said matching per-user routing table with a range of network addresses containing said destination address; routing the packet to a matching network if said destination address is contained within one of said ranges of network addresses for said currently accessible networks; routing the packet to a default network if said destination address is not contained within one of said ranges of network addresses for said currently accessible networks. 	<p>1. A method for routing a packet sent from a user in a system in which the user may be connected to multiple networks simultaneously, including:</p> <ul style="list-style-type: none"> extracting a source address from the packet; finding a per-user routing table corresponding to said source address, said per-user routing table <u>unique to the user and</u> containing entries corresponding to one or more currently accessible networks for the user and the range of network addresses corresponding to said currently accessible networks; extracting a destination address from the packet; seeking an entry in said matching per-user routing table with a range of network addresses containing said destination address; routing the packet to a matching network if said destination address is contained within one of said ranges of network addresses for said currently accessible networks; and routing the packet to a default network if said destination address is not contained within one of said ranges of network addresses for said currently accessible networks.

Art Unit: 2666

<p>4. A method for routing a packet sent from a user in a system in which the user may be connected to multiple networks simultaneously, including:</p> <p>extracting a source address from the packet;</p> <p>finding a per-user routing table corresponding to said source address, said per-user routing table containing entries corresponding to one or more currently accessible networks for the user and the range of network addresses corresponding to said currently accessible networks;</p> <p>extracting a destination address from the packet;</p> <p>seeking an entry in said matching per-user routing table with a range of network addresses containing said destination address;</p> <p>routing the packet to a matching network if said destination address is contained within one of said ranges of network addresses for said currently accessible networks;</p> <p>ignoring said packet and alerting the user to that effect if said destination address is not contained within one of said ranges of network addresses for said currently accessible networks.</p>	<p>4. A method for routing a packet sent from a user in a system in which the user may be connected to multiple networks simultaneously, including:</p> <p>extracting a source address from the packet;</p> <p>finding a per-user routing table corresponding to said source address, said per-user routing table <u>unique to the user and</u> containing entries corresponding to one or more currently accessible networks for the user and the range of network addresses corresponding to said currently accessible networks;</p> <p>extracting a destination address from the packet;</p> <p>seeking an entry in said matching per-user routing table with a range of network addresses containing said destination address;</p> <p>routing the packet to a matching network if said destination address is contained within one of said ranges of network addresses for said currently accessible networks; and</p> <p>ignoring said packet and alerting the user to that effect if said destination address is not contained within one of said ranges of network addresses for said currently accessible networks.</p>
<p>15. A gateway for routing a packet sent from a user in a system in which the user may be connected to multiple networks simultaneously, including:</p> <p>a packet source address extractor;</p> <p>one or more per-user routing tables, each of said routing tables containing entries corresponding to one or more currently accessible networks for the user and the range of network addresses corresponding to said currently accessible networks;</p> <p>a per-user routing table searcher coupled to said packet source address extractor and coupled to said one or more per-user routing tables;</p> <p>a packet destination address extractor;</p> <p>a per-user routing table entry seeker coupled to said packet destination address extractor and coupled to said per-user routing table searcher;</p> <p>a matching network router coupled to said per-user routing table entry seeker if the destination address of the packet is contained within one of said ranges of network addresses for said currently accessible networks; and</p> <p>a default network router coupled to said per-user routing table entry seeker if the destination address of the packet is not contained within any of said ranges of network addresses for said currently accessible networks.</p>	<p>15. A gateway for routing a packet sent from a user in a system in which the user may be connected to multiple networks simultaneously, including:</p> <p>a packet source address extractor;</p> <p>one or more per-user routing tables, each of said routing tables <u>unique to a user and</u> containing entries corresponding to one or more currently accessible networks for the corresponding user and the range of network addresses corresponding to said currently accessible networks;</p> <p>a per-user routing table searcher coupled to said packet source address extractor and coupled to said one or more per-user routing tables;</p> <p>a packet destination address extractor;</p> <p>a per-user routing table entry seeker coupled to said packet destination address extractor and coupled to said per-user routing table searcher;</p> <p>a matching network router coupled to said per-user routing table entry seeker if the destination address of the packet is contained within one of said ranges of network addresses for said currently accessible networks; and</p> <p>a default network router coupled to said per-user routing table entry seeker if the destination address of the packet is not contained within any of said ranges of network addresses for said currently accessible networks.</p>
<p>40. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for routing a packet sent from a user in a system in which the user may be connected to multiple networks simultaneously, said method steps including:</p> <p>extracting a source address from the packet;</p> <p>finding a per-user routing table corresponding to said source address, said per-user routing table containing entries corresponding to one or more currently accessible networks for the user and the range of network addresses corresponding to said currently accessible networks;</p> <p>extracting a destination address from the packet;</p> <p>reading the entries of said matching per-user routing table, looking for a range of network addresses containing said destination address;</p> <p>determining a destination network based upon a matching entry in said per-user routing table if said destination address is contained within one of said ranges of network addresses for said currently accessible networks;</p> <p>ignoring said packet and alerting the user to that effect if said destination address is not contained within one of said ranges of network addresses for said currently accessible networks;</p> <p>looking up said destination network in a table, each entry in said table having a router network address corresponding to each network currently accessible;</p> <p>establishing a tunneling session to said corresponding router network</p>	<p>36. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for routing a packet sent from a user in a system in which the user may be connected to multiple networks simultaneously, said method steps including:</p> <p>extracting a source address from the packet;</p> <p>finding a per-user routing table corresponding to said source address, said per-user routing table <u>unique to the user and</u> containing entries corresponding to one or more currently accessible networks for the user and the range of network addresses corresponding to said currently accessible networks;</p> <p>extracting a destination address from the packet;</p> <p>reading the entries of said matching per-user routing table, looking for a range of network addresses containing said destination address;</p> <p>determining a destination network based upon a matching entry in said per-user routing table if said destination address is contained within one of said ranges of network addresses for said currently accessible networks;</p> <p>ignoring said packet and alerting the user to that effect if said destination address is not contained within one of said ranges of network addresses for said currently accessible networks;</p> <p>looking up said destination network in a table, each entry in said table having a router network address corresponding to each network currently accessible;</p>

Art Unit: 2666

address; and forwarding the packet to said corresponding router network address through said tunneling session.	establishing a tunneling session to said corresponding router network address; and forwarding the packet to said corresponding router network address through said tunneling session.
---	---

Although the conflicting claims are not identical, they are not patentably distinct from each other because:

- For claims 1-42, Applicant's claims merely broaden the scope of the patent by eliminating the terms "routing table unique to the user and containing entries". It had been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re karlson, 136 USPQ 184 (CCPA). Also note Ex Parte Raine, 168 USPQ 375 (bd. App. 1969); omission of a reference element whose function is note need would be obvious to one skilled in the art.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUC H TRAN whose telephone number is (571) 272-3172. The examiner can normally be reached on M-F (8-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RAO SEEMA can be reached on (571) 272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuc Tran
Assistant Examiner
Art Unit 2664

P.t
9/18/04


DANG TON
PRIMARY EXAMINER